

AMENDMENTS TO THE CLAIMS

1. (Original) An extruded, stamped, pressed, rolled or injection molded gypsum plaster product made from a paste comprising:

α gypsum plaster;
water in an amount of from 70% to 170% of the stoichiometric amount;
a binder; and
a clay or another rheology modifier functionally equivalent to a clay,
the product being substantially free of macro defects.

2. (Currently Amended) An extruded, stamped, pressed, rolled or injection molded gypsum plaster product substantially free of macro defects and made from a paste comprising:

α gypsum plaster;
water in an amount of from 70% to 170% of the stoichiometric amount,
a binder; and
a rheology modifier such that the paste has a yield stress sufficient to make the paste self supporting;
~~the product being substantially free of macro defects.~~

3. (Original) A product according to claim 2 in which the rheology modifier is a clay.

4. (Currently Amended) A product according to ~~claim 1~~ claim 2 in which the rheology modifier is present in the said paste in an amount of up to 20% weight of plaster.

5. (Currently Amended) A product according to ~~claim 1~~ claim 2 in which all the gypsum plaster is α gypsum plaster.

6. (Currently Amended) A product according to ~~claim 1~~ claim 2 in which the water is present in the said paste in an amount of from 13% to 32% by weight of plaster.

7. (Currently Amended) A product according to ~~claim 1~~ claim 2 in which the binder is a cellulosic binder.

8. (Original) A product according to claim 1 in which the binder is at least one of polyvinylalcohol and polyethyleneglycol.

9. (Currently Amended) A product according to ~~claim 1~~ claim 2 in which the binder is present in an amount of at least 0.1% by weight.

10. (Currently Amended) A product according to ~~claim 1~~ claim 2 in which the binder is present in an amount of no more than 10% by weight.

11. (Currently Amended) The product according to ~~claim 1~~ claim 2, further comprising a component selected from the group consisting of setting retarder, lightweight aggregate and fiber.

12. (Original) A product according to claim 11 in which the lightweight aggregate is ceramic microspheres or cenospheres.

13. (Original) A product according to claim 11 in which the lightweight aggregate is present in an amount of up to 20% by weight.

14. (Original) A product according to claim 11 in which the fiber is glass or polypropylene fiber.

15. (Original) A product according to claim 11 in which the fiber is present in an amount of up to 10% by weight.

16. (Original) The product according to claim 11, in which the water is present in said paste in an amount of from 13% to 32% by weight of α plaster.

17. (Original) A method for making a gypsum plaster product according to claim 1 comprising forming a paste by:

mixing α gypsum plaster, water in an amount of from 70% to 170% of the stoichiometric amount and a binder:

mixing into that mixture a clay or other rheology modifier functionally equivalent to a clay;

working the paste into a plastic condition; and extruding, stamping, pressing or injection molding the paste to form a shaped product.

18. (Original) A method for making a gypsum plaster product according to claim 2 comprising forming a paste by:

mixing α gypsum plaster, water in an amount of from 70% to 170% of the stoichiometric amount and a binder;

mixing into that mixture a rheology modifier such that the paste has a yield stress sufficient to make the paste self supporting;

working the paste into a plastic condition; and

extruding, stamping, pressing or injection molding the paste to form a shaped product.

19. (Original) A method according to claim 18 in which a clay is mixed into the said mixture as the rheology modifier.

20. (Original) A method according to claim 17, further comprising forming a pre-gel/suspension comprising water and binder and adding α gypsum plaster to the pre-gel/suspension.

21. (Original) A method according to claim 17 further comprising adding a setting retarder to the composition.

22. (Original) A method according to claim 17 carried out at a temperature above 60°C.

23. (Original) A method according to claim 17 in which the paste is extruded after working and in which the extruded paste is supported as it leaves the die.

24. (Currently Amended) A gypsum plaster paste comprising:

α gypsum plaster;

water in an amount of from 70 % to 170 % of the stoichiometric amount;

a binder; and

a rheology modifier such that the paste has a yield stress sufficient to make the paste self supporting,

the product being substantially free of macro defects.

25. (Currently Amended) A The paste according to claim 24 in which the rheology modifier is a clay.

26. (Original) A product according to ~~claim 1~~ claim 2 in which the binder is present in an amount of at least 1% by weight.

27. (Original) A product according to ~~claim 1~~ claim 2 in which the binder is present in an amount of no more than 5% by weight.

28. (Cancelled)

29. (Currently Amended) A ~~The~~ product according to claim 2 ~~in which~~ wherein the binder is at least one of polyvinylalcohol and polyethyleneglycol.

30. (Currently Amended) A ~~The~~ product according to claim 3 ~~in which~~ wherein the binder is at least one of polyvinylalcohol and polyethyleneglycol.

31. (Original) A product according to claim 4 in which the binder is at least one of polyvinylalcohol and polyethyleneglycol.

32. (Original) A product according to claim 5 in which the binder is at least one of polyvinylalcohol and polyethyleneglycol.

33. (Original) A product according to claim 6 in which the binder is at least one of polyvinylalcohol and polyethyleneglycol.

34. (Original) A product according to claim 7 in which the binder is at least one of polyvinylalcohol and polyethyleneglycol.

35. (Original) A method according to claim 18 in which the paste is extruded after working and in which the extruded paste is supported as it leaves the die.

36. (New) An extruded, stamped, pressed and rolled or injection molded gypsum plaster product substantially free of macro defects and made from a paste, which consists essentially of

α gypsum plaster;

water in an amount of from 70% to 170% of the stoichiometric amount,

a binder; and

a rheology modifier such that the paste has a yield stress sufficient to make the paste self supporting.

37. (New) An extrudable gypsum plaster paste which comprises
 α gypsum plaster

13 to 32 % by weight of water based on the weight of the α gypsum plaster paste, said water being present in an amount necessary to achieve substantially complete rehydration of the plaster from the hemihydrate form to the dihydrate form,

At least 1 % to up to 10 % by weight of a binder, and
10 - 20% by weight of a rheology modified.

38. (New) The extrudable gypsum plaster paste of claim 36 were in the rheology modifier is a clay.